



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,087	08/20/2003	Ryuji Fukada	040302-0343	4958
22428	7590	05/08/2006	EXAMINER	
FOLEY AND LARDNER LLP			OMGBA, ESSAMA	
SUITE 500			ART UNIT	
3000 K STREET NW			PAPER NUMBER	
WASHINGTON, DC 20007			3726	

DATE MAILED: 05/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

2

Office Action Summary	Application No. 10/644,087	Applicant(s) FUKADA ET AL.	
	Examiner Essama Omgba	Art Unit 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8 is/are allowed.
- 6) ☒ Claim(s) 9-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 17, 2006 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 9-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no disclosure of a "machine to perform a first circumference correction on one of the metal rings **under non-rolling working**", nor is there disclosure of a "means for performing a first circumference correction on of the metal rings **under non-rolling working**" in the specification as originally filed.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 9-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are indefinite in that the examiner cannot ascertain what is the meaning of the expression "under non-rolling working". Applicant has not provided an explanation of the meaning of that expression in the specification as originally filed.

Since Applicant has not provided an explanation of the expression "under non-rolling working" and the expression appears to be functional language, all previously made rejections are maintained as outlined below.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 9-14 and 17-20, *as best understood by the examiner*, are rejected under 35 U.S.C. 102(a) as being anticipated by Applicant's Admitted Prior Art (AAPA).

Applicant, at pages 1 and 2 of the specification to be known as AAPA, discloses a manufacturing apparatus of an endless belt having metal rings built up and differing in circumference wherein the apparatus comprises a circumference correction section and

a means for performing solution heat treatment on the metal rings, the metal rings being formed by rolling. Applicant should note that performing two circumference correction steps with a solution heat treatment in between the correction steps is considered intended use. The recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). There is no recited structure that would differentiate the claimed apparatus from the one used in the prior art. Also the expression "under non-rolling working" appears to be functional language that does not lend any patentable weight to the apparatus being claimed. The apparatus should be defined by its structural elements.

For claims 19 and 20, the correction apparatus of AAPA includes rollers that could be designated "work" or "tension" rollers. Furthermore it is inherent that the rolling roller in AAPA can be moved into engagement with a ring (during rolling) and out of engagement with the ring (after rolling is performed).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3726

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Imai et al. (US Patent 6,631,542) and Corse (US Patent 3,892,344).

AAPA discloses an apparatus of an endless metal belt as shown above. Although AAPA does not specifically disclose a circumference measurement section, however such circumference measurement section are conventional in the art as attested by Imai et al., see column 9, lines 32-36. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have provided a circumference measurement station to the apparatus of AAPA, in light of the teachings of Imai et al., in order to assess the results of the corrected circumferences.

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA/Imai et al. as applied to claim 15 above, and further in view of Hosomi et al. (JP 361082910) and Corse (US Patent 3,892,344).

AAPA/Imai et al. discloses an apparatus as shown above. Although AAPA/Imai et al. does not the circumference of the metal rings being measured based on a moving length of the tension roller necessary to apply a predetermined tension to each of the metal rings, however such is known as attested by Hosomi et al., see abstract. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have measured the circumference of the metal rings of AAPA/Imai et al. based on a moving length of the tension roller necessary to apply a

Art Unit: 3726

predetermined tension to each of the metal rings, in light of the teachings of Hosomi et al, as is known in the art. Applicant should note that servo-controlled rollers are well known in the art as attested by Corse, see column 1, lines 39-47. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have servo-controlled the rollers of AAPA/Imai et al./Hosomi et al., in order to better control correction of the metal rings circumference.

Allowable Subject Matter

11. Claims 1-8 are allowed.

Response to Arguments

12. Applicant's arguments filed April 17, 2006 have been fully considered but they are not persuasive.

In response to Applicant's argument that Applicant's Admitted Prior Art (AAPA), at pages 1 and 2 of the specification, does not disclose a manufacturing apparatus of an endless metal belt having metal rings built up and differing in circumference that includes "a machine to perform a first circumference correction on one of the metal rings under non-rolling working", the examiner submits that the meaning of the expression "under non-rolling working" cannot be ascertained since Applicant has not provided an explanation of its meaning in the specification as originally filed. Furthermore the expression appears to be functional language and not a structural limitation. As outlined in the above rejections, the apparatus should be defined by its structural elements.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (571) 272-4532. The examiner can normally be reached on M-F 9-6:30, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3726

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Essama Omgba
Primary Examiner
Art Unit 3726

eo
May 2, 2006